

## DOCUMENT RESUME

ED 139 135

EC 100 710

AUTHOR Kendall, William S.  
TITLE Reading Achievement and Self-Concept of Educable Retarded Boys in Three Educational Settings.  
PUB DATE Apr 77  
NOTE 24p.; Paper presented at the Annual International Convention, The Council for Exceptional Children (55th, Atlanta, Georgia, April 11-15, 1977)  
EDRS PRICE MF-\$0.83 HC-\$1.67 Plus Postage.  
DESCRIPTORS \*Educable Mentally Handicapped; Elementary Education; Exceptional Child Research; Males; Mentally Handicapped; \*Reading Achievement; \*Regular Class Placement; Resource Centers; \*Self Concept; Special Classes

## ABSTRACT

The relationship between reading achievement, class placement, and self-concept was investigated with three groups of educable mentally retarded (EMR) male children between 102 and 144 months old: 30 Ss enrolled full-time in a special class, 30 Ss enrolled in the fourth grade regular classes, and 30 Ss integrated in the regular fourth grade program and receiving additional support beyond that ordinarily provided in regular classes through learning resource centers. Results indicated that the self-concept of segregated and integrated EMR children receiving special help was lower than that of regular class EMR children. Differences in reading achievement and self-concept were found for the three settings.  
(Author/IM)

\*\*\*\*\*  
\* Documents acquired by ERIC include many informal unpublished \*  
\* materials not available from other sources. ERIC makes every effort \*  
\* to obtain the best copy available. Nevertheless, items of marginal \*  
\* reproducibility are often encountered and this affects the quality \*  
\* of the microfiche and hardcopy reproductions ERIC makes available \*  
\* via the ERIC Document Reproduction Service (EDRS). EDRS is not \*  
\* responsible for the quality of the original document. Reproductions \*  
\* supplied by EDRS are the best that can be made from the original. \*  
\*\*\*\*\*

Reading Achievement and Self-Concept of  
Educable Retarded Boys in Three  
Educational Settings

William S. Kendall

Prairie View A&M University

Considerable attention has been directed recently toward the inadequacies of special classes as a primary educational system for educable mentally retarded (EMR) children (Budoff, 1972; Dunn, 1968; Iax & Carter, 1976; Lilly, 1970; MacMillan, 1972). This dissatisfaction with segregated facilities for mildly retarded children has occurred for a variety of reasons. First, the efficacy studies have demonstrated that special classes provide an atmosphere that is educationally and morally unjust. Second, there has been an increasing concern with the effects of labeling and the misclassification of children from low socio-economic and/or minority group backgrounds as mentally retarded. Concurrently, the school's increased capability to deliver individualized programs for children with special needs, coupled with desire to provide normalizing experiences by having them associate with nonretarded children has accelerated the movement toward mainstreaming.

Despite the notion to mainstream, "providing the most appropriate education for each child in the least restrictive setting," there is little empirical evidence relating to the

effects of reintegrating EMR children into regular classes once they have spent one or more years in a special class. Reynolds and Balow (1972) stated that the critical issue for special education is selecting or designing the appropriate match between the handicapped child's attributes and needs, and the educational program elements required to maximize the child's personal and educational growth.

Although many studies have focused on the efficacy of special versus regular class placement, few, have addressed the issue of implications of the placement itself on self-concept. Of those that have been reported, (Birch, 1974; Christoplos, 1973; Garrison & Hammill, 1971; Haring & Krug, 1975) conclude that a large number of educable mentally retarded children in segregated special classes are capable of making normal growth in regular programs. Although there is no proof of the long term damage to individuals in special classes as a function of being labeled mentally retarded, there is considerable evidence of the distaste and embarrassment felt by children so labeled and placed (MacMillan, Jones & Aloia, 1974). In contrast, Smith & Arkans (1974) question the removal of the mildly retarded from segregated classes. The authors suggest that the majority of these retarded individuals have multiple handicaps, and the present physical arrangement of regular schools and classes is unsuitable for them. Martin (1974) has argued that efforts to

provide training and experiences for regular classroom teachers are not keeping pace with the efforts to mainstream. Recent studies (Clark, 1975; Hobbs, 1975; MacMillan, Jones & Meyers, 1976) have called attention to additional problems in the conceptionalization of mainstream programs.

A number of investigators (e.g., Gorlow, Butler & Guthrie, 1963; Mouly, 1973; Purkey, 1970; Snyder, 1966; Wink, 1963) have reported a substantial relationship between positiveness of self-concept and achievement. Borg (1966) and Meyerowitz (1962) observed that students in special classes had lower self-concepts than their regular class counterparts. Carroll (1967) and Towne, Joiner, & Schurr (1967) reported higher self-concepts in the segregated class retardates. Bacher (1965) Knight (1967) and Mayer (1966) showed no self-concept differences in segregated or regular class retardates. In reference to this equivocal research perspective, it is important to know the retardate's reading abilities in relation to their self-concept in a learning setting. It is assumed, that prolonged failure to perform a task which one's culture expects of an individual may contribute to a damaged self-concept. For this study self-concept is best conceived as a system of attitudes toward oneself (Mouly, 1973).

Since it is likely that a single educational program is not appropriate for all children (Adamson & Van Etten, 1972),

it becomes imperative to know whether the integration of EMR children in regular classes and learning resource rooms will significantly improve their reading achievement. Social acceptance or rejection by peers and the attitudes of regular classroom teachers toward these children emerge as major factors in determining self-concept and reading achievement.

The rationale for the present study is that there are two possibilities of change in self-concept through placement in self-contained, regular and mainstreaming classes; (a) the child may feel rejected because he is isolated from his peers; or (b) the child may feel among intellectual peers, adequate and accepted. If investigation should show that there is no difference between children being serviced in the three groups, this would be interpreted to mean that placement in a particular class has produced no change in self-concept.

The present study reports a segment of a larger investigation into the relationship between reading achievement and self-concept in three groups of educable mentally retarded children. If as Jordan & deCharms (1959) conclude, i.e., in the regular grades, there is pressure for academic achievement of which the EMR child is aware, and feels inadequate to meet, as opposed to enrollment in special classes for retarded children, one might posit two hypotheses: (a) There is no difference in reading achievement between EMR children in

segregated, regular and mainstreaming classes. (b) There is no difference in self-concept between EMR children in the three educational settings. Additionally, the data were examined to determine whether the nature of self-derogation is different for each of the three groups.

#### Method

##### Subjects

Ninety subjects were randomly chosen from five elementary schools in the inner city of a large metropolitan area. The test subjects were randomly selected so that a proportionate ethnic distribution of 52% Negro, 23% Spanish-surnamed and 25% Other were represented. The population includes children from both middle and lower socio-economic groups, however, the majority were from a lower socio-economic background.

The three groups included: (a) 30 segregated EMR children enrolled fulltime in a special class, (b) 30 EMR children enrolled in the fourth grade regular classes, receiving no treatment for their reading disabilities, and (c) 30 EMR children integrated in the regular fourth grade program and receiving additional support beyond that ordinarily provided in regular classes through Learning Resource Centers. The subjects were assigned to the identified setting for a period of at least three years for inclusion in this study.

Participants were between the ages of 102 and 144 months. The mean chronological age (CA), IQ, and the standard deviations (SDs) for each group are presented in Table 1. Samples were drawn from the intellectual range of 50 to 70 as measured by the Wechsler Intelligence Scale for Children-Revised (WISC-R). Only males were used in the study.

#### Learning Resource Center

The experimental treatment to which the reintegrated subjects were exposed was a learning resource center, which represent one programmatic option for reintegration. The center consisted of a double or triple-sized classroom staffed by three teachers - one experienced in diagnostic and individualization techniques, and two support teachers. Approximately 20 children were accommodated at any given time. The center functioned as the cornerstone of implementation of the mainstreaming concept. Each session of 20 children contained approximately one-third who had been former special-class students. The remainder were regular-class children referred by their classroom teachers because they needed special educational help, either remedial or enrichment, or because they could serve as tutors to the ex-special-class children. Subjects attended the learning resource center for approximately 40 minutes per day, 5 days a week, although some former special-class students spent larger por-

TABLE 1  
Chronological Age (CA)<sup>a</sup> and IQ<sup>b</sup> for the Three Groups

Group	CA <sup>a</sup>		IQ <sup>b</sup>	
	Mean	SD	Mean	SD
Segregated	131.10	8.92	64.10	3.76
Regular	119.6	6.32	66.2	3.56
Integrated	129.00	14.4	63.6	4.5

<sup>a</sup>In Months.

<sup>b</sup>Wechsler Intelligence Scale for Children-Revised.



tions of each day there depending on their educational needs, and spent the remainder of their time engaged in the identical activities as their regular classmates.

The learning resource center was organized as a series of activity stations within one establishment, with each sector devoted to modifying the tool skills. A variety of technological equipment was provided for this purpose. The teachers provided the former special-class children with emotional support, encouragement, and counseling to aid them in coping with some of the problems they encountered in the regular classes.

#### Procedure

The Wechsler Intelligence Scale for Children-Revised (WISC-R) was used to determine the intellectual classification range for participants in this sample. The Iowa Tests of Basic Skills was used as a measure of reading achievement. All IQ scores were determined no more than 2 years prior to this study.

The Illinois Index of Self-Derogation (IISD) (Meyerowitz, 1962) was used to measure the self-concept of the sample. This instrument was selected because it is easily used with children who cannot read or do not read with competence. The index consists of 30 items, each item consisting of two sentences. One sentence describes a child with a socially

undesirable ascription, such as: "Some children do not like the child with the balloon." The second sentence describes a child with neutral or socially desirable ascription, e.g., "Many children like the child with the flag." The child listens to the descriptions of the two children and then marks in a designated area of his score sheet the child which he regards as "most" like himself.

For this study, the IISD type format was retained, however a modification was made. Rather than requiring the respondent to identify his answer on the score sheet according to the stick figures called for in the original instrument, the subject was asked to place an x beneath his answer choice. Items were scored in the direction of positive self-concept, with 100 being the top score.

The IISD was administered in groups of five to seven children at a time. Prior to the administration of the instrument, rapport was established with each group of children by discussing the general concept of the test. Each child was told to think in terms of "which child he liked best." Instructions for marking responses were given. For clarity, the examiner read each item aloud repeating items when necessary, before subjects were allowed to mark their responses. Reading achievement and (IISD) testing was begun and completed during the spring, 1976.

## Results

The data were analyzed using one-way analyses of variance. Significant differences were found among the means of the reading achievement and self-concept scores of the three groups ( $F = 4.6$ ,  $2/87$  df,  $p < .05$ , and  $F = 3.97$ ,  $2/87$  df,  $p < .05$ , respectively). Further analyses of these findings were performed for all three pairwise combinations of the means: (a) segregated EMR groups vs. regular EMR group; (b) segregated EMR group vs. integrated EMR group; and (c) regular EMR group vs. integrated EMR group. The means and standard deviations (SDs) for reading achievement and self-concept for the three groups of subjects appear in Table 2.

The reading achievement results for the segregated vs. regular EMR contrast indicated a significant difference ( $t = 2.70$ ,  $p < .05$ ). The comparisons of the segregated vs. integrated, and regular vs. integrated group means were not significantly different ( $t = 1.37$ ,  $p < .05$ , and  $t = 1.50$ ,  $p < .05$ , respectively). Analyses of the self-concept scores for the three groups revealed a significant difference between the segregated vs. regular, and regular vs. integrated EMR group means ( $t = 2.71$ ,  $p < .05$ , and  $t = 2.36$ ,  $p < .05$ , respectively). No significant difference was revealed between the segregated vs. integrated groups ( $t = .19$ ,  $p < .05$ ).

TABLE 2  
Reading Achievement and Self-Concept Variables  
for the Three Groups

Group	Reading <sup>a</sup>		Self-Concept	
	Mean	SD	Mean	SD
Segregated	2.07	.35	92.23	5.09
Regular	2.3	.33	95.5	4.19
Integrated	2.18	.27	92.5	5.57

<sup>a</sup>Iowa Tests of Basic Skills.

<sup>b</sup>Illinois Index of Self-Derogation.

The first hypothesis, there is no difference in reading achievement between the three groups was rejected ( $F = 4.6$ ,  $2/87$  df,  $p < .05$ ). Further analysis of this finding revealed a significant difference between the segregated and regular class subjects ( $t = 2.70$ ,  $p < .05$ ).

The second hypothesis, there is no difference in self-concept between EMR children in the three groups was rejected ( $F = 3.97$ ,  $2/87$  df,  $p < .05$ ). A check was made in reference to the distribution of the number of derogations made by each of the three groups. The segregated group had a mean number of derogations of 7.76; for regular classes 4.16; and for mainstreaming classes was 7.16. A small derogation mean suggests a positive self-concept.

#### Discussion

---

The results of this investigation confirm those offered previously (Borg, 1966; Meyerowitz, 1962) which indicated that the self-concept of EMR children in segregated facilities was lower than that of regular class EMR subjects. An additional finding in the present study was that the former group did not differ significantly from the mainstreaming group.

Investigation has shown no significant reading achievement difference between the regular and integrated groups, however, a small mean difference is obvious. The integrated group demonstrated lower achievement scores than the regular

class subjects. This was so even with treatment for their reading disabilities in learning resource centers. An explanation for this finding is that the returned retarded children may invest considerable amounts of energy attempting to conceal from their classmates the fact that they had previously been enrolled in a special class for retarded pupils. One way to accomplish this is by not engaging in behaviors that would tend to single them out as being different from the group. Since an inability to read would elicit negative reactions from the other children, they may make deliberate attempts to avoid placing themselves in such an embarrassing position by refusing to fully utilize their reading potentials. This finding is in keeping with the positions of Shotel, Iano, & McGettigan (1972) and Iano (1972). The authors reported that even with massive pre-service for teacher training, the mentally retarded child being served by a resource room is a social isolate and is generally not well accepted. The results of a significant reading achievement difference between the segregated and regular class subjects suggest (Beery, 1972, Kaufman, Gottlieb, Agard, & Kubic, 1975) that retarded pupils make as much or more progress in the regular grades as they do in segregated facilities.

No significant reading achievement difference was observed between the segregated and integrated groups.

Small achievement gains were demonstrated by the integrated group in contrast to the segregated group. This finding can be interpreted as supporting the position of Lilly (1975), suggesting that segregated facilities have not had a significant effect on academic achievement. One might expect achievement changes to be more evident after the initial process of redefinition has been pursued successfully over several years. Support for this speculation is suggested by Gottlieb (1974), who followed another group of ex-special-class students for two years following reintegration. Although students' first year scores showed no change, there were substantial increments in reading and math scores during the second postintegration year. The reintegrated students gained an average of nearly one full year in reading and math scores.

Because the mainstreaming movement has focused so largely on the educable mentally retarded, it seems appropriate to review some of the obstacles concerning this trend. First, the movement toward integration of the mentally retarded into the regular classrooms and learning resource rooms will fail if the attitudes of the students and teachers are not made a focus of concern. Most teachers have had little, if any, experience with the mentally retarded and share the negative attitudes of the general public with regard to them. Second, if these high risk children are to be successfully

mainstreamed, they must be academically and socially prepared for such reentry. Third, it is unfortunate that attempts have been made to mainstream all EMR children. There are many mentally retarded children whose problems and/or conditions require total care and/or treatment. The wholesale elimination of all special programs and segregated facilities will be as flagrant a mistake as falacious and inappropriate placement.

The greatest challenge confronting this nation today is to provide quality education to all its youths (Birch, 1976). It follows that a humanistic approach be taken in the total development of the child. Simple exposure to subject matter is not enough. The necessity of assisting the retarded child to build a positive self-concept is crucial for its role in determining what he will be and what he will do. Self-esteem is related to achievement. Not only is the retarded child who achieves likely to form a positive view of himself, but, for him to learn, he must see himself as a learner. It is imperative that EMR children become self-actualizing in a learning setting. Love, self-respect, respect for others, and the feeling of being accepted are essential for mental health (Maslow, 1976).

This study has given support to the regular classroom as being the most efficacious in the reading achievement and self-concept of the EMR child. However, much more research



is needed for a number of unanswered questions before definite conclusions can be obtained. Thus, it is essential that special education professionals seek additional empirical evidence of the most appropriate course of action, while continuing to maintain and improve the current level of service in each setting.

In conclusion, it has been shown that significant differences in reading achievement and self-concept exist in segregated, regular and mainstreaming settings. Although attempts have been made to individualize the educational program for the retarded, there appears to be much needed revision of these efforts. Providing for personal, emotional, social and curriculum needs of retardates in a school setting, might result in a more positive reading achievement and self-concept in each identified setting.

## References

- Adamson, G., & Van Etten, G. Zero Reject Model Revised: A Workable Alternative. *Exceptional Children*, 1972, 38, 735-738.
- Bacher, J. H. The Effect of Special Class Placement of the Self-Concept of the Adolescent Mentally Retarded in Relation to Certain Groups of Adolescents. *Dissertation Abstracts*, 1965, 25, 2846-2847.
- Beery, K. E. Models for Mainstreaming. San Rafael: Dimensions Publishing Company, 1972.
- Birch, J. W. Issues and Problems in Mainstreaming. In P. H. Mann (Ed.), *Shared Responsibility for Handicapped Students: Advocacy and Programming*. Coral Gables, Fla.: The University of Miami Training and Technical Assistance Center, 1976.
- Birch, J. W. Mainstreaming: Educable Mentally Retarded Children in Regular Classes. Reston, Va.: The Council for Exceptional Children, 1974.
- Borg, W. R. Ability Grouping in the Public Schools. Madison, Wis.: Dembar Educational Research Services, 1966.
- Budoff, M. Providing Special Education Without Special Classes. *Journal of School Psychology*, 1972, 10, 199-205.
- Carroll, A. W. The Effects of Segregated and Partially Integrated School Programs of Self-Concept and Academic Achievement of Educable Mentally Retardates. *Exceptional Children*, 1967, 34, 93-99.

Christoplos, F. Keeping Exceptional Children in Regular Classes. *Exceptional Children*, 1973, 39, 569-572.

Clark, G. M. Mainstreaming for the Secondary Educable Mentally Retarded: Is It Defensible? Focus on *Exceptional Children*, 1975, 7 (2), 1-5.

Dunn, L. M. Special Education for the Mildly Retarded- Is Much of It Justifiable? *Exceptional Children*, 1968, 34, 5-22.

Garrison, M., & Hammill, D. D. Who Are the Retarded? *Exceptional Children*, 1971, 38, 13-20.

Gorlow, L., Butler, A., & Guthrie, G. M. Correlates of Self-Attitudes of Retardates. *American Journal of Mental Deficiency*, 1963, 67, 549-555.

Gottlieb, J. Evaluation of Resource Room Program, Watertown Public Schools, 1973-74. Unpublished report, Research Institute for Educational Problems, Cambridge, 1974.

Haring, N. G., & Krug, D. A. Placement in Regular Programs: Procedures and Results, *Exceptional Children*, 1975, 41, 413-420.

Hobbs, N. *The Futures of Children*. San Francisco: Jossey-Bass, 1975.

Iano, R. P. Shall We Disband Special Classes? *Journal of Special Education*, 1972, 6, 167-177.

Jordan, T. E., & deCharms, R. The Achievement Motive in Normal and Mentally Retarded Children. American Journal of Mental Deficiency, 1959, 64, 457-466.

Kaufman, M. J., Gottlieb, J., Agard, J. A., & Kubic, M. B. Project Prime, Mainstreaming Toward an Explication of the Construct. Project No. IM-71-001, U. S. Office of Education, Bureau of Education for the Handicapped, Intramural Research Program, March, 1975.

Knight, O. B. The Self-Concept of Educable Mentally Retarded Children in Special and Regular Classes. Unpublished doctoral dissertation, Dissertation Abstracts 28-4483A. University of North Carolina, Chapel Hill, 1967.

Lax, B., & Carter, J. L. Social Acceptance of the EMR in Different Educational Placements. Mental Retardation, 1976, 14 (2), 10-13.

Lilly, M. S. Special Education-A Cooperative Effort. Theory Into Practice, 1975, 14 (2), 82-89.

Lilly, M. S. Special Education: A Teapot in a Tempest. Exceptional Children, 1970, 37, 43-48.

MacMillan, D. L. Motivational Style: An Important Consideration in Programs for EMR-Labeled Children. Journal of School Psychology, 1972, 10, 111-116.

MacMillan, D. L., Jones, R. L., & Aloia, G. The Mentally Retarded Label: A Review of Research and Theoretical Analysis. American Journal of Mental Deficiency, 1974, 79, 241-261.

MacMillan, D. L., Jones, R. L., & Meyers, C. E. Mainstreaming the Mildly Retarded: Some Questions, Cautions, and Guidelines. *Mental Retardation*, 1976, 14, 3-10.

Martin, E. W. Some Thoughts on Mainstreaming. *Exceptional Children*, 1974, 41, 150-153.

Maslow, A. H. Humanistic Theory of Learning. In W. S. Sahakian (Ed.), *Introduction to the Psychology of Learning*. Chicago: Rand McNally, 1976.

Mayer, C. L. The Relationship of Early Special Class Placement and the Self-Concepts of Mentally Handicapped Children. *Exceptional Children*, 1966, 33, 77-81.

Meyerowitz, J. H. Self Derogation in Young Retardates and Special Class Placement. *Child Development*, 1962, 33, 443-451.

Mouly, G. J. *Psychology For Effective Teaching*. (3rd ed.) New York: Holt, Rinehart & Winston, 1973.

Purkey, W. W. Self-Concept and School Achievement. Englewood Cliffs, N. J.: Prentice-Hall, 1970.

Reynolds, M. C., & Palow, B. Categories and Variables in Special Education. *Exceptional Children*, 1972, 38, 357-366.

Shotel, J. R., Iano, R. P., & McGettigan, J. F. Teacher Attitudes Associated with the Integration of Handicapped Children. *Exceptional Children*, 1972, 38, 667-683.

Smith, J. O., & Arkans, J. R. Now More Than Ever: A Case for the Special Class. *Exceptional Children*, 1974, 7, 497-502.

Snyder, R. T. Personality Adjustment, Self Attitudes, and Anxiety Differences in Retarded Adolescents. American Journal of Mental Deficiency, 1966, 71, 33-41.

Towne, R. C., Joiner, L. M., & Schurr, T. The Effect of Special Class Placement of the Self-Concept of Academic Ability of the Mentally Retarded. A Time Series Experiment. Paper Presented at Meetings of the Council for Exceptional Children, St. Louis, 1967.

Wink, C. F. Mental Retardation and Learning Under Symbolic Reinforcement in View of Self-Acceptance. Dissertation Abstracts, 1963, 23, 2430-2431.